CALCULATING BREAD/BREAD ALTERNATE to comply with FCS Instruction 783-1 for grains/breads

- * Breading is in Group A (1 serving = 20g/0.7 oz)
- * Batter (prepared or dry weight is in Group B (1 serving = 25g/0.9 oz)

or

* 1 serving of Bread/bread alternate is the amount of product to provide 14.75 grams of enriched flour/whole grain

There are several acceptable ways to calculate the Bread/bread alternate component using the updated Grains/Breads Instruction information. <u>Please take note the components required for each different calculation.</u>

METHOD 1. Monitor the total batter/breader weight.

Use this calculation if only the total batter/breading weight is monitored. Note: the percent of enriched flour/whole grain <u>must</u> be greater than the total liquid used in the combined batter/breading composite. *<u>Additionally</u>, the enrichment level for the breading must be 85-percent or greater and the batter must be 65-percent enriched or greater to use method one.

A) Check to make sure that the breader and batter are each made from enriched flour/whole grain and that the <u>combined enriched flour/whole grain components are greater</u> than the total liquid (example: water and oil if applicable). This can be confirmed by a composite listing or a calculation.

			% Enriched = Components		Total Enrichment
Breader	50%	X	0.85*	=	42.5%
Batter (dry basis)	17%	X	0.65*	=	11.05%
Water	33% 100%				53.55%

53.55% enriched components > 33% water

B) Calculations for Grains/Breads contribution:

(ounces of **breading** per serving + ounces of **wet/raw batter** per serving) = servings of bread alternate per serving **0.9** ounces per serving

$$\frac{\text{(.6 oz breading)} + \text{(.6 oz wet batter)}}{0.9 \text{ oz}} = 1.33 \text{ servings}$$

Round down to the nearest ¼ serving. This method provides "1.25 servings of Bread Alternate"

METHOD 2. Monitor the batter and breading weights separately.

Use this calculation if the batter and breading weights are monitored separately and each are made from enriched flour/whole grain.

$$= .2266 + .8571 = 1.083$$
 servings

Round down to the nearest ¼ serving. This method provides "1.00 serving of bread alternate"

METHOD 3. Grams of Enriched Flour/Whole Grain per serving.

You may also calculate the contribution of bread alternate by directly using the grams of enriched flour/whole grain contained in the batter/breading. <u>1 serving = 14.75 grams of</u> enriched flour/whole grain

(ounces of **dry batter*** per serving X percent of enriched flour/whole grain X 28.35 grams per ounce) + (ounces of breading X percent of enriched flour/whole grain X 28.35 grams per ounce) ÷ 14.75 grams per serving

* $(0.6 \text{ oz wet batter} \quad X \quad 34\% \text{ dry batter mix}) = 0.204 \text{ oz dry batter}$

$$=$$
 $3.7592 + 14.4585 = 1.235$ servings

Round down to the nearest ¼ serving. This method provides "1.00 serving of bread alternate"

Calculations for Corn Dogs (and other products in which Batter is monitored only in the cooked state): Corn dogs are prepared using cooked links or franks dipped into batter and then cooked. The finished (cooked/prepared) batter weights are monitored rather than the raw weights. Exhibit A of the Grains/Breads instruction lists batter in group B at 0.9 oz/serving. This batter weight is the finished weight not the raw weight. [Since the link was cooked before the batter was applied it is not likely to lose weight during the batter cooking process.] [This allows us to use the cooked/prepared weight of the batter for calculating the bread alternate component.]

(ounces of **cooked/prepared** batter per serving) = servings of bread alternate per serving = per serving

Fill specs: 2.0 oz frankfurter
+ 2.0 oz cooked batter
4.0 oz corn dog (finished weight)

Calculation: 2.0 oz cooked batter

0.9 oz per serving = 2.22 servings

Round down to the nearest ¼ serving. This method provides "2.00 servings bread alternate for the Child Nutrition Meal Pattern Requirements"

U.S DEPARTMENT OF AGRICULTURE Food Safety and Inspection Service APPLICATION FOR APPROVAL OF LABELS, MARKING OR DEVICE	THIS IS TO	BE US	ED	3.	4. ESTABLISHMEN AND/OR PORTS	IT OR PLANT NO. OF ENTRY			
FSIS has determined that information provided in items 8, 9, and 10 is exempt from mandatory disclosure under the Freedom of Information Act 5 U.S.C 552 (b)(4).	AS AN	EXAM. ON.			5. NAME OF PROD Batter/Breach				
APLLICANT. See cover for instructions.									
6. ACTION REQUESTED BY USDA FOR APPROVAL SKETCH FINAL Was label previously approved as a sketch? YES If sketch, date of sketch NO Number of labels on hand Number of days requested Number of days requested 7. AREA OF PRINCIPAL DISPLAY PANEL Number of labels on hand Number of days requested SQ. IN.									
8. PRODUCT FORMULA			CT WEIG (No Fractions)	9. PROCES	9. PROCESSING PROCEDURES				
Wet (raw) Batter Water 66% Dry Batter Mix*: enriched wheat flour (niacin, iron, thiamine mononitrate, riboflavin, folic acid), enriched corn meal (niacin, iron, thiamine mononitrate, riboflavin, folic acid), modified food starch, salt, dried whey, leavening (sodium aluminum phosphate), nonfat dry milk, soybean oil, spices. Breading Breading Breading**: enriched wheat flour (niacin, iron, thiamine mononitrate, riboflavin, folic acid), enriched corn flour (niacin, iron, thiamine mononitrate, riboflavin, folic acid), spices, dried whey, dextrose,salt. Batter/breading not to exceed 25% of total product weight.			50 00	Add 0.60 oz wet (rav total of 1.2 oz batt * Batter Mix (Dr enriched wheat ** Breading	Add 0.60 oz wet (raw) Batter and 0.60 oz Breading for a total of 1.2 oz batter/breading combined. * Batter Mix (Dry) enriched wheat flour + enriched corn meal = 65% ** Breading enriched wheat flour + enriched corn flour = 85%				
10. NAME AND ADDI	(Percent mu RESS OF FIRM (Below and between dots		100 00	ATURE OF APPLICANT OR AGEN	Γ	DATE			
0		0	12. SIGN	ATURE OF INSPECTOR		July 1, 1996 date			
FSQS FORM 8822-1 (11/79) REPLACE	S MP FORM 480 AND 480A, WHICH A		13. CONDITIONS APPLYING TO USE OF LABELS OR DEVICE Before labeling can be used, the firm must have an approved quality control program.						